

Ecological Assessment of 7 Parks in North Saanich, BC

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Prepared for:

The Friends of North Saanich Parks (FNPS)

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Introduction

The parks in North Saanich are places for people to walk, play, admire the ocean views, and perhaps have a picnic or do some bird-watching. The parks also often provide examples of vegetation types that may be much less common than in the past.

This leaves challenges for park managers who have to manage parks for different stakeholders: Trails need to be maintained, grass needs to be cut (in places), and hazardous trees may need to be removed. At the same time, park managers are now often tasked with managing the ecological attributes of a park which might include rare plants or ecosystems, or things like nest trees for heron or eagles and other wildlife habitat. Park managers also have to make decisions about which parks, or areas of a park, should be kept “neat and tidy”, and which areas can be kept wild and unmanaged. Another challenge for park managers in North Saanich is the small size of many of the parks in North Saanich where any intervention is more keenly felt – as opposed to very large parks elsewhere where there is lots of room to have both intensively managed and unmanaged “wild” park. With this in mind, in April 2021 Madrone was hired by Friends of North Saanich Parks (FNPS) to do a two-day field assessment of 7 of the 46 or so parks in North Saanich including:

- Quarry Park – 2 ha*
- Gulf View Park – 1.5 ha
- Lillian Hoffar Park – 4 ha
- Nymph Point Park – 1.5 ha
- Green Park – 4 ha
- Denham Till Park – 3.5 ha
- RO Bull park – 2 ha

*ha = hectares

These forested parks were chosen for the study because of the number of invasive plants in each of these parks along with the potential for rare plants or ecosystems to be present. The FNPS may also have wished to have the “neutral” observations from someone outside the area. Given the scope, our objectives for each of the parks was the following:

- Survey for any rare plants

- Identify the habitat in each park that has the best potential for provincially rare plants or ecosystems
- Describe the ecosystem types (rare or otherwise) that occur in each of the parks
- Locate other things of ecological interest in the parks such as unusual plants (but not necessarily rare), old forest, invasive plants, shell middens, impact of past management practices.
- Where relevant, comment on park management practices.

Prior to going in the field background research was done including:

- Examining the subject parks on aerial imagery (Google Earth)
- Use the BC Conservation Data Centre Species Explorer tool to locate existing rare elements that have been mapped in or adjacent to the parks.
- Using the Species Explorer tool to compile a list of rare plants that have the potential to occur in the parks or in adjacent areas.
- Communications with FNSP to confirm the scope and methodology.

Field work was done on April 15 & 16, 2021 by Harry Williams RPBio, Certified Arborist. Field work consisted of walking through the main portions of each park and looking for anything of biological interest. For each park a list was compiled of all plants and ecosystems seen. Photographs were taken and comments were made, and observations recorded. The field data collected was summarized and compiled in the project report (this document). All the parks in North Saanich are in the Coastal Douglas-fir moist maritime biogeoclimatic zone – which also is found on lower elevations on the south-east coast of Vancouver Island and Gulf Islands.

RO BULL PARK

This small but diverse park (2 ha) contains a significant stand of old forest, provincially red-listed species and ecosystems, and a high diversity of trees, shrubs, and herbs. This site is “significant” because the magnificent old trees that dominate this park. It’s hard to imagine that at one time old forests such as these were commonplace in Saanich and on southern Vancouver Island. These trees are still healthy and provide great habitat for birds, insects, and small mammals. Like many old stands, the trees are spread apart from each other, with the gaps between them receiving enough light to support many native shrubs and wildflowers. A small Garry oak meadow occurs along the eastern boundary of the park.

Ecologically the forested part of the park is in the CDFmm/04 Douglas-fir – Grand fir – Oregon Grape plant community. Due to the old growth trees, this ecosystem is provincially red-listed – largely due to the fact that in this subzone less than 2% of the remaining forest is old growth. The age of the trees was not measured, but is estimated to range from 300- 450 years.

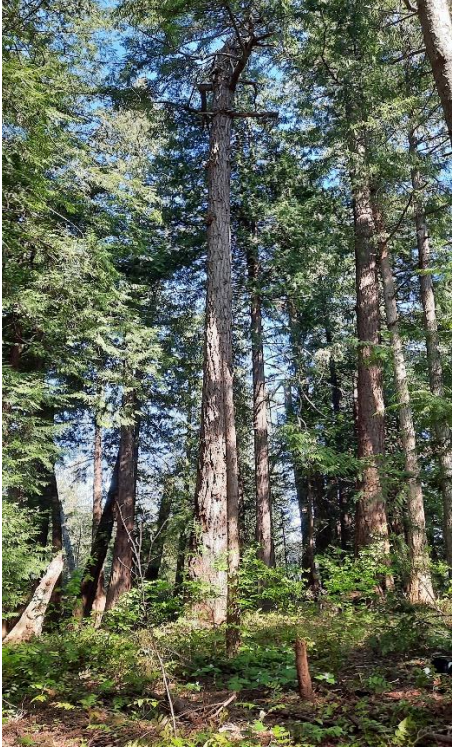
Rare plants: No rare plants were found in this park, however there is potential for them to occur in a small Garry oak meadow on the eastern side of the park.

Management objectives

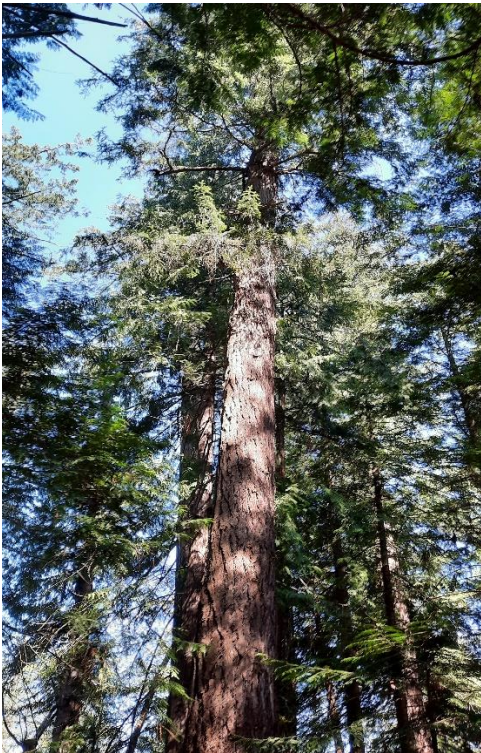
Keep people on the trails as much as possible to avoid trampling the plants and compacting the soil. Split cedar fences are attractive and excellent for guiding people to stay on the pathways.

Any tree removal or pruning should be duly considered. Hazard trees must be identified as such by a certified arborist. Trees fallen across paths can be cleared, but cut wood must remain in the park as coarse woody debris (which provides habitat for invertebrates and is beneficial for the soil). There should be no firewood cutting of living, fallen or cleared trees.

Photo Section



RO Bull Park has a small but impressive stand of old-growth Douglas-fir.



Close-up photo of several of the very large Douglas-fir trees.



A small Garry oak meadow is found on the eastern side of this park. Note the white-flowered fawn lily / Easter lily (*Erythronium oregonum*).



Another view of the Garry oak meadow.



Small-flowered nemophila (*Nemophila parviflora*). An uncommon herb, but not rare, found in the Garry oak meadow in this park.



Gairdner's yampah (*Perideridia gairdneri*), an uncommon (but not rare) plant found in the Garry oak meadow.

Plants of RO Bull Park

Lifeform	Common name	Scientific name
Ferns	bracken fern	<i>Pteridium aquilinum</i>
	sword fern	<i>Polystichum munitum</i>
	licorice fern	<i>Polypodium glycyrrhiza</i>
	lady fern	<i>Athyrium felix-femina</i>
grass	orchard grass	<i>Dactylis glomerata</i>
grass-like	small-flowered wood-rush	<i>Luzula parviflora</i>
Herbs	broad-leaved starflower	<i>Trientalis latifolia</i>
	sweet-scented bedstraw	<i>Galium triflorum</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
	pathfinder	<i>Adenocaulon bicolor</i>
	western trillium	<i>Trillium ovatum</i>
	small-flowered blue-eyed Mary	<i>Collinsia parviflora</i>
	bitter cress	<i>Cardamine oligosperma</i>
	wall lettuce	<i>Lactuca muralis</i>
	white fawn-lily (Easter lily)	<i>Erythronium oregonum</i>
	chickweed	<i>Stellaria media</i>
	miner's lettuce	<i>Claytonia perfoliata</i>
	small-flowered nemophila	<i>Nemophila parviflora</i>
	Gairdner's yampah	<i>Perideridia gairdneri</i>
	daffodil	<i>Narcissus sp.</i>
	false lily-of-the-valley	<i>Maianthemum dilatatum</i>
shrubs	ocean spray	<i>Holodiscus discolor</i>
	Indian plum	<i>Osmaronia cerasiformis</i>
	waxberry	<i>Symphoricarpos albus</i>
	huckleberry	<i>Vaccinium parvifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	trailing blackberry	<i>Rubus ursinus</i>
	hazelnut	<i>Corylus cornuta</i>
	salal	<i>Gaultheria shallon</i>
	Nootka rose	<i>Rosa nutkana</i>
	Scotch broom	<i>Cytisus scoparium</i>
	hairy honeysuckle	<i>Lonicera hispidula</i>
	western trumpet	<i>Lonicera ciliosa</i>
	honeysuckle	

	tall Oregon grape	<i>Mahonia aquifolium</i>
	saskatoon berry	<i>Amelanchier alnifolia</i>
	salmon berry	<i>Rubus spectabilis</i>
tree	western redcedar	<i>Thuja plicata</i>
	big leaf maple	<i>Acer macrophyllum</i>
	Douglas-fir	<i>Pseudotsuga menziesii</i>
	casacara	<i>Rhamnus purshiana</i>
	Pacific dogwood	<i>Cornus nuttallii</i>
	western yew	<i>Taxus brevifolia</i>
	arbutus	<i>Arbutus menziesii</i>
	English hawthorn	<i>Crataegus monogyna</i>
	red alder	<i>Alnus rubra</i>
	Garry oak	<i>Quercus garryana</i>
	grand fir	<i>Abies grandis</i>
moss	Oregon beaked moss	<i>Kindbergia oregana</i>

DENHAM TILL PARK

This 3.5 ha park is on a parcel that borders Clayton Road to the north and Birch Road to the south. The southern half of the park is maintained as a grassy area including a playground for children. The western edge of this area has been left to develop into a hedgerow made up of mostly native species. It is also good habitat for songbirds. The parcel was originally a farm run by the Till family.

Just north of the grassy area is a hazelnut orchard, which may be a legacy of the original farm. In the northern third of the property is a mature forest dominated by Douglas-fir. The taller trees probably range from 65 – 85 years old. Ecologically the forested portion of the park is in the CDFmm/01 Douglas-fir – Salal plant community. Other common trees include western redcedar, bigleaf maple, and scattered arbutus and Garry oak.

No rare plants found, and this 3.5 ha park has a fairly low potential for rare plants. There are several oak trees present, and several old fruit trees which could be re-invigorated with careful pruning. The areas with highest potential for rare plants are in the “interface” areas, such as the transition area from forest to grassy area.

Objectives for the forested area

This park offers the opportunity for families to perhaps have a picnic in the grassy area, followed by a walk through the forest. Several well-placed interpretive signs could be considered at the start of the trails.

Continue to manage the trails in the forested area safe and free from hazards, but be judicious in vegetation removal or pruning, and only remove trees that have been verified as hazardous by a certified arborist. Cut wood must remain in the forest as coarse woody debris, and there should be no firewood cutting of living, fallen or cleared trees.

Keep the forested area intact and let it develop, in time, into an old forest. The present level of management appears appropriate, but keep the trails relatively narrow, and generally apply a low level of management.

PHOTO SECTION



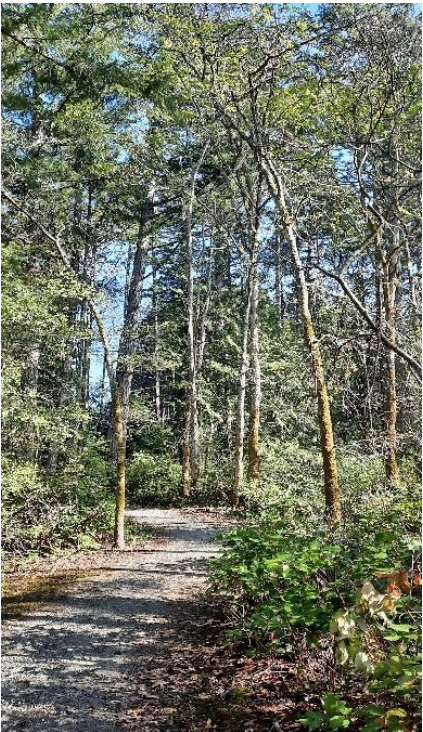
View of the forest in Denham Till park, taken from the original house site, looking west.



The mature conifer forest in this park consists primarily of Douglas-fir, along with western red-cedar, grand fir, arbutus, and occasional Garry oak.



Mature forest, with some tall arbutus trees present. Tree ages likely range from 50 – 80 years.



Some Garry oak trees area found close to the original house site.



View of the park taken from the parking lot on the Birch Road side. Note the hazelnut (filbert) orchard at the edge of the grass, and the mature forest in the background. Scattered legacy fruit trees remain from the former farm.

Plants of Denham Till Park

Lifeform	Common name	Scientific name
ferns	sword fern	<i>Polystichum munitum</i>
	bracken fern	<i>Pteridium aquilinum</i>
grass	reed canary grass	<i>Phalaris arundinacea</i>
herbs	wall lettuce	<i>Lactuca muralis</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
	broad-leaved starflower	<i>Trientalis latifolia</i>
	western trillium	<i>Trillium ovatum</i>
moss	Oregon beaked moss	<i>Kindbergia oregana</i>
shrubs	salal	<i>Gaultheria shallon</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Indian plum	<i>Osmaronia cerasiformis</i>
	Nootka rose	<i>Rosa nutkana</i>
	waxberry	<i>Symphoricarpos albus</i>
	trailing blackberry	<i>Rubus ursinus</i>
	hairy honeysuckle	<i>Lonicera hispidula</i>
	huckleberry	<i>Vaccinium parvifolium</i>
trees	Big-leaf maple	<i>Acer macrophyllum</i>
	red alder	<i>Alnus rubra</i>
	arbutus	<i>Arbutus menziesii</i>
	Douglas fir	<i>Pseudotsuga menziesii</i>
	casara	<i>Rhamnus purshiana</i>
	western redcedar	<i>Thuja plicata</i>
	grand fir	<i>Abies grandis</i>
	black cottonwood	<i>Populus trichocarpa</i>

GREEN PARK

As is the case with Denham Till Park, portions of the 3.5 hectare Green Park occupy the site of a former farm, and evidence can be seen of the former structures. However the age of the forest is less than that of Denham Till or RO Bull Park, with trees being in the 45–65 year range. However, several older “vets” are present, particularly on the east side of the park. The tree cover consists of Douglas-fir, western red-cedar, red alder, grand fir, and black cottonwood (see Table 3 for a full plant list).

Rare plant potential

No rare plants were found, and this park has a fairly low potential for rare plants. The area with highest potential for rare plants is the dense forest along the eastern boundary in which phantom orchid (*Cephalanthera austiniiae*) might possibly be found (see Photo 1). There is also a small potential that Ochroleucus bladderwort (*Utricularia ochroleuca*) might occur in the larger (sunnier) of the two ponds in the park (see Photo 2).

Management Objectives

This park offers the opportunity for people to enjoy the two ponds, and follow the paths around the ponds and through the forest. Several interpretive signs could be considered at the entry points to the park. With a trees of different tree ages and the two ponds, it is likely a good area for bird watching.

As was mentioned for the other parks, continue to manage the trails in the forested area safe and free from hazards, but be judicious in vegetation removal or pruning, and only remove trees that have been deemed hazardous by a certified arborist. Cut wood must remain in the forest as coarse woody debris, and there should be no firewood cutting of living, fallen or cleared trees.

Keep the forested area intact, and let it develop, in time, into an old forest. The present level of management appears appropriate, but keep the trails relatively narrow, and generally apply a low level of management, except in picnic areas by the larger pond.



Phantom orchid (*Cephalanthera austiniiae*) (Google images)



Ochroleucous bladderwort (*Utricularia ochroleuca*) (Google images)



While most of the forest is young, there are a number of large Douglas-fir trees in the park, which provide good habitat for birds, small mammals, and insects. The large dead tree in this photo has been used by cavity nesting birds.



There are two ponds in the park. This pond is the smaller of the two, and is also more shaded.



This park has pleasant walkways through the forest and around the ponds.



The trail loops through forests of different ages and species. In this photo the most common trees are red alder, with scattered black cottonwood.

Plants of Green Park

Lifeform	Common name	Scientific name
ferns	sword fern	<i>Polystichum munitum</i>
	bracken fern	<i>Pteridium aquilinum</i>
grass	reed canary grass	<i>Phalaris arundinacea</i>
herbs	wall lettuce	<i>Lactuca muralis</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
	broad-leaved starflower	<i>Trientalis latifolia</i>
	western trillium	<i>Trillium ovatum</i>
moss	Oregon beaked moss	<i>Kindbergia oregana</i>
shrubs	salal	<i>Gaultheria shallon</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Indian plum	<i>Osmaronia cerasiformis</i>
	Nootka rose	<i>Rosa nutkana</i>
	waxberry	<i>Symphoricarpos albus</i>
	trailing blackberry	<i>Rubus ursinus</i>
	hairy honeysuckle	<i>Lonicera hispidula</i>
	huckleberry	<i>Vaccinium parvifolium</i>
trees	big leaf maple	<i>Acer macrophyllum</i>

red alder	<i>Alnus rubra</i>
arbutus	<i>Arbutus menziesii</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
cascara	<i>Rhamnus purshiana</i>
western redcedar	<i>Thuja plicata</i>
grand fir	<i>Abies grandis</i>
black cottonwood	<i>Populus trichocarpa</i>

NYMPH POINT PARK

This 2.5 ha park is a beautiful small park overlooking Tsehum Harbor. For a small park it has many interesting features such as a shell midden (archaeological site), old growth Douglas-fir trees, Garry oak meadow, uncommon species such as seaside juniper, Pacific crabapple, cascara, and pathways, and an intertidal area with salt-tolerant plants.

Rare Plants

No listed rare plants were found; however this park does have potential for rare plants – specifically the Garry oak meadow, steep south-facing rocky areas, and the intertidal areas.

Management issues

In this park were seen a few questionable management issues including:

- Excessive pruning of a seaside juniper to create an ocean view. This species is naturally beautiful, and is also uncommon. Ocean views are possible from many locations in this park, there was no need to prune this tree – especially in such a fashion that tree section in question may not regenerate
- Planting trees in a natural meadow where tree growth is already limited by thin, dry soils.
- Ditching the pathway to the north to remove moisture that supports the vegetation of that area



View of Nymph Point Park from the breakwater. Arbutus, juniper, Garry oak, and Douglas-fir can be seen in this photo. A small Garry oak meadow can be seen just to the right of the staircase.



On the beach side of Nymph Point there is a large shell midden. This is likely an archaeological site and should be left alone – no soil disturbance or vegetation clearing should occur (except invasive plants).



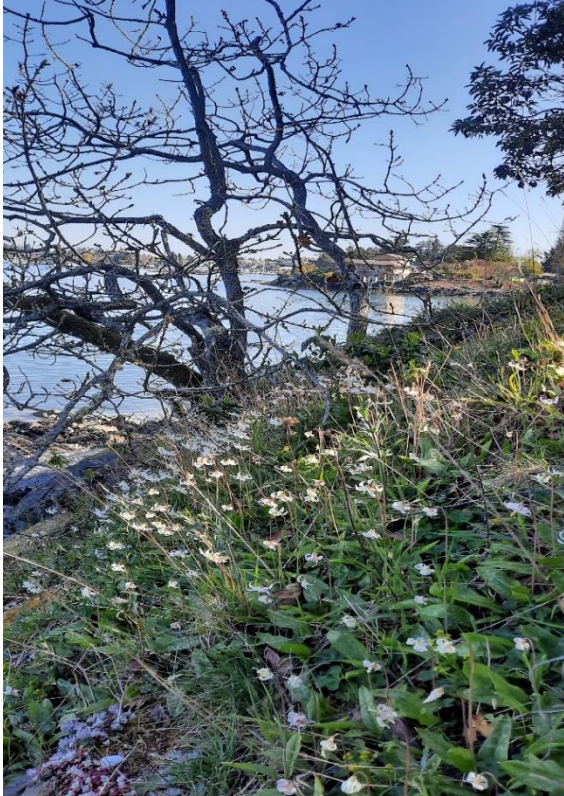
This is the beach on the east side of Nymph Point, with the shell midden found in the bank above the high tide mark. In the background is Tsehum Harbour.



This photo shows part of the Garry oak meadow mentioned above. While planting trees is a commendable act, in this case they are planted in a wildflower meadow where the soil is too thin and too dry in summer to support tree growth.



These rocks face south and create a warm microclimate, and a potential spot for rare plants. Colourful yellow lichens are also found on these rocks.



Garry oak meadow in Nymph Park showing white fawn-lily (*Erythronium oregonum*) in bloom.



This photo of the pathway area that is also part of the Park. A shallow ditch has been excavated however the exact purpose of the ditch is not clear. It is naturally a moist area that supports many native species that grow in seepage areas, so the idea of removing moisture should be reconsidered.



Various native shrubs and small trees are found adjacent to the pathway mentioned above. Some of these have been cut, yet didn't appear to be posing a hazard or impeding foot traffic. Some of these cut specimens are fairly uncommon and valuable to wildlife such as cascara (this photo), Pacific crabapple, Indian plum, and saskatoon berry.



Heron or Raptor nest present in large red alder.



View of the pathway, looking north.

Plants of Nymph Point Park

Lifeform	Common name	Scientific name
ferns	licorice fern	<i>Polypodium glycyrrhiza</i>
	sword fern	<i>Polystichum munitum</i>
grasses	brome grass	<i>Bromus sp.</i>
	dunegrass	<i>Elymus mollis</i>
	western fescue	<i>Festuca occidentalis</i>
herbs	pathfinder	<i>Adenoacaulon bicolor</i>
	nodding onion	<i>Allium cernuum</i>
	miner's lettuce	<i>Claytonia perfoliata</i>
	white fawn-lily (Easter lily)	<i>Erythronium oregonum</i>
	chocolate lily	<i>Fritillaria lanceolata</i>
	sweet-scented bedstraw	<i>Galium triflorum</i>
	wall lettuce	<i>Lactuca muralis</i>
	purple peavine	<i>Lathyrus nevadensis</i>
	false lily-of-the-valley	<i>Maianthemum dilatatum</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
broad-leaved stonecrop		<i>Sedum spathulifolium</i>
	broad-leaved starflower	<i>Trientalis latifolia</i>
moss	Oregon beaked moss	<i>Kindbergia oregana</i>
shrubs	saskatoon berry	<i>Amelanchier alnifolia</i>
	Scotch broom	<i>Cytisus scoparium</i>

	salal	<i>Gaultheria shallon</i>
	ocean spray	<i>Holodiscus discolor</i>
	western trumpet	<i>Lonicera ciliosa</i>
	honeysuckle	
	hairy honeysuckle	<i>Lonicera hispidula</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Indian plum	<i>Osmaronia cerasiformis</i>
	red-flowering currant	<i>Ribes sanguineum</i>
	Nootka rose	<i>Rosa nutkana</i>
	salmon berry	<i>Rubus spectabilis</i>
	trailing blackberry	<i>Rubus ursinus</i>
	waxberry	<i>Symphoricarpos albus</i>
trees	grand fir	<i>Abies grandis</i>
	big leaf maple	<i>Acer macrophyllum</i>
	red alder	<i>Alnus rubra</i>
	arbutus	<i>Arbutus menziesii</i>
	English hawthorn	<i>Crataegus monogyna</i>
	seaside juniper	<i>Juniperus maritima</i>
	Pacific crabapple	<i>Malus fusca</i>
	Douglas fir	<i>Pseudotsuga menziesii</i>
	Garry oak	<i>Quercus garryana</i>
	casara	<i>Rhamnus purshiana</i>
	western redcedar	<i>Thuja plicata</i>

LILLIAN HOFFER PARK

This 4 ha park, on the shores of Tsehum Harbour, has a variety of vegetation types including marine foreshore habitat, a swampy area filled with many moisture tolerant trees and shrubs. A midden (archaeological site) is also present. A grassy area with scattered shrubs and trees (see photo below) occupies the original home site of the Hoffer family. The park looks out over Tsehum Harbour.

The park has high diversity of trees, and different vegetation types that provide for good bird habitat (songbirds, raptors, and herons). However, the fill used to provide support for nearby residential developments has altered the natural hydrology of the site.

Rare Plants

No rare plants were found, and the potential for rare plants is low. However there is some potential for rare plants to occur in the swampy area as well as in the intertidal area.

Other interesting plants are mentioned in the plant list (below).

Management Issues

This park has 200 metres of marine foreshore with associated beaches and tidal areas. Marine foreshore provides many important ecosystem services such as nesting and perching areas for songbirds, raptors, and seabirds, shading the possible beach spawning areas for Pacific sand lance and surf smelt (see also Appendix 1). Therefore, any vegetation cutting or removal in this area should be carefully considered, except in the main park area (see photo below), where more intensive management is warranted.



This photo shows the former Hoffer house site and garden which is now managed as a picnic area and providing viewscapes over the harbour. Some of the original shrubs and trees are still present. There is about 200 m of ocean front and beach.



The swampy area, back from the beach, has many interesting shrubs and herbs, including Slough sedge (*Carex obnupta*) - seen in this photo. Common shrubs include black twinberry, red-osier dogwood, Indian plum, and salmonberry.



The concrete pad is part of the former boat repair business that existed here in the past.



View of the Marine Foreshore area, looking up onto the site of the original house. Soils in this area underlain with glacial marine clay. A shell midden is also present. While some clearing to maintain views is warranted, view windows should be of modest size so that native vegetation is not overly impacted.



View of the breakwater and the inner parts of Tsehum Harbour. This part of the park provides the best views of all – a panorama view of the harbour.

Plants of Lillian Hoffer Park

Lifeform	Common name	Scientific name
ferns	licorice fern	<i>Polypodium glycyrrhiza</i>
	sword fern	<i>Polystichum munitum</i>
grass-like	slough sedge	<i>Carex obnupta</i>
herbs	pathfinder	<i>Adenocaulon bicolor</i>
	miner's lettuce	<i>Claytonia perfoliata</i>
	scouring rush	<i>Equisetum hyemale</i>
	sweet-scented bedstraw	<i>Galium triflorum</i>
	large-leaved avens	<i>Geum macrophyllum</i>
	wall lettuce	<i>Lactuca muralis</i>
	purple peavine	<i>Lathyrus nevadensis</i>
	false lily-of-the-valley	<i>Maianthemum dilatatum</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
	fringe cup	<i>Tellima grandiflora</i>
broad-leaved starflower	<i>Trientalis latifolia</i>	
moss	Oregon beaked moss	<i>Kindbergia oregana</i>
shrubs	saskatoon berry	<i>Amelanchier alnifolia</i>
	red-osier dogwood	<i>Cornus stolonifera</i>
	salal	<i>Gaultheria shallon</i>
	ocean spray	<i>Holodiscus discolor</i>
	western trumpet	<i>Lonicera ciliosa</i>
	honeysuckle	
	hairy honeysuckle	<i>Lonicera hispidula</i>
	black twinberry	<i>Lonicera involucrata</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Indian plum	<i>Osmaronia cerasiformis</i>
	Nootka rose	<i>Rosa nutkana</i>
	salmon berry	<i>Rubus spectabilis</i>
	trailing blackberry	<i>Rubus ursinus</i>
	waxberry	<i>Symphoricarpos albus</i>
huckleberry	<i>Vaccinium parvifolium</i>	
trees	grand fir	<i>Abies grandis</i>
	big leaf maple	<i>Acer macrophyllum</i>
	red alder	<i>Alnus rubra</i>
	arbutus	<i>Arbutus menziesii</i>
	English hawthorn	<i>Crataegus monogyna</i>
	Pacific crabapple	<i>Malus fusca</i>
	black cottonwood	<i>Populus trichocarpa</i>
	bitter cherry	<i>Prunus emarginata</i>
	Douglas fir	<i>Pseudotsuga menziesii</i>
	Garry oak	<i>Quercus garryana</i>

cascara
western redcedar

Rhamnus purshiana
Thuja plicata

GULF VIEW PARK

This small 1.5 ha park has been used by the public for many years. Before the Pat Bay Highway was built in 1960, East Saanich Road was one of the main roads on the Saanich Peninsula, and this park was a popular spot for motorists to stop and take in the view of the Gulf Islands. Today the park is mostly used as a picnic spot by local residents.

There were no rare plants found, however there is a small Garry oak meadow present (see photos below), and has some rare plant potential. This meadow has high diversity of herbs and wildflowers. Although the meadow appears to be healthy, the public should be kept off the site, possibly by putting up a split-cedar fence around it.



View of the picnic area in the center of the park. Fill was added to the area to the right at some point, and has now filled with shrubs and scattered Douglas-fir or grand fir.



Garry oak meadow, showing the carpet-like harvest brodiaea (*Brodiaea coronaria*). The flowers of this plant are rarely seen due to deer browse.



Close-up picture of the Garry oak meadow, specifically few-flowered shooting star (*Dodocatheon pulchellum*).

Plants of Gulf View Park

Lifeform	Common name	Scientific name
ferns	licorice fern	<i>Polypodium glycyrrhiza</i>
	sword fern	<i>Polystichum munitum</i>
herbs	pathfinder	<i>Adenocaulon bicolor</i>
	miner's lettuce	<i>Claytonia perfoliata</i>
	harvest brodiaea	<i>Brodiaea coronaria</i>
	few-flowered shooting star	<i>Dodocatheon pulchellum</i>
	purple-leaved willowherb	<i>Epilobium ciliatum</i>
	sweet-scented bedstraw	<i>Galium triflorum</i>
	white fawn-lily (Easter lily)	<i>Erythronium oregonum</i>
	common camas	<i>Camassia quamash</i>
	wall lettuce	<i>Lactuca muralis</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
Pacific sanicle	<i>Sanicula crassicaulis</i>	
broad-leaved starflower	<i>Trientalis latifolia</i>	
mosses	Oregon beaked moss	<i>Kindbergia oregana</i>
	cat's-tail moss	<i>Rhytidiadelphus triquetrus</i>
shrubs	saskatoon berry	<i>Amelanchier alnifolia</i>
	salal	<i>Gaultheria shallon</i>
	ocean spray	<i>Holodiscus discolor</i>

	Privet	<i>Ligustrum vulgare</i>
	hairy honeysuckle	<i>Lonicera hispidula</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Nootka rose	<i>Rosa nutkana</i>
	trailing blackberry	<i>Rubus ursinus</i>
	waxberry	<i>Symphoricarpos albus</i>
	huckleberry	<i>Vaccinium parvifolium</i>
trees	grand fir	<i>Abies grandis</i>
	big leaf maple	<i>Acer macrophyllum</i>
	arbutus	<i>Arbutus menziesii</i>
	English hawthorn	<i>Crataegus monogyna</i>
	Douglas fir	<i>Pseudotsuga menziesii</i>
	Garry oak	<i>Quercus garryana</i>
	western redcedar	<i>Thuja plicata</i>

QUARRY PARK

This 2-hectare park occupies the site of former Quarry which is now being managed as a picnic area. Outside this are there are forested areas dominated by young to mature Douglas-fir, a western red-cedar dominated stand on a north-facing slope, and a Garry oak meadow on upper slope with thin soils. These forests should be managed to grow into large, old trees. Any naturally fallen trees should remain in the forest and allowed to rot naturally. Hazard trees should be verified by a certified arborist before removal. Tree pruning should only be done only where required – no “over-enthusiastic” pruning.

No rare plants were found, but the Garry oak meadow does have some potential for rare plants – especially “vernal pools” – low spots in the bedrock that are wet in early spring. This Garry oak meadow is quite small so is susceptible to damage from walkers and mountain bikes. An appropriately placed split-cedar fence might be sufficient to protect this meadow area.



Young to mature Douglas-fir forest dominates mid to lower slope areas in the park.



Uniform stand of western red-cedar on the north-facing slope in the park.



Garry oak meadow with white fawn-lily (*Erythronium oregonum*) and licorice fern (*Polypodium glycyrrhiza*).



Another view of the Garry oak meadow on shallow soil.



There is a trail up to the Garry oak meadow, however walkers should stay on the trails.

Plants of Quarry Park

Lifeform	Common name	Scientific name
ferns	licorice fern	<i>Polypodium glycyrrhiza</i>
	sword fern	<i>Polystichum munitum</i>
herbs	pathfinder	<i>Adenocaulon bicolor</i>
	harvest brodiaea	<i>Brodiaea coronaria</i>
	miner's lettuce	<i>Claytonia perfoliata</i>
	small-flowered blue-eyed Mary	<i>Collinsia parviflora</i>
	few-flowered shooting star	<i>Dodocatheon pulchellum</i>
	purple-leaved willowherb	<i>Epilobium ciliatum</i>
	white fawn-lily (Easter lily)	<i>Erythronium oregonum</i>
	sweet-scented bedstraw	<i>Galium triflorum</i>
	wall lettuce	<i>Lactuca muralis</i>
	mountain sweet-cicely	<i>Osmorhiza chilensis</i>
	Pacific sanicle	<i>Sanicula crassicaulis</i>
broad-leaved starflower	<i>Trientalis latifolia</i>	
mosses	Oregon beaked moss	<i>Kindbergia oregana</i>
	cat's-tail moss	<i>Rhytidiadelphus triquetrus</i>
shrubs	saskatoon berry	<i>Amelanchier alnifolia</i>
	salal	<i>Gaultheria shallon</i>
	ocean spray	<i>Holodiscus discolor</i>
	Privet	<i>Ligustrum vulgare</i>
	hairy honeysuckle	<i>Lonicera hispidula</i>
	tall Oregon grape	<i>Mahonia aquifolium</i>
	dull Oregon grape	<i>Mahonia nervosa</i>
	Nootka rose	<i>Rosa nutkana</i>
	trailing blackberry	<i>Rubus ursinus</i>
	waxberry	<i>Symphoricarpos albus</i>
huckleberry	<i>Vaccinium parvifolium</i>	
trees	grand fir	<i>Abies grandis</i>
	big leaf maple	<i>Acer macrophyllum</i>
	red alder	<i>Alnus rubra</i>
	arbutus	<i>Arbutus menziesii</i>
	English hawthorn	<i>Crataegus monogyna</i>
	Douglas fir	<i>Pseudotsuga menziesii</i>
	Garry oak	<i>Quercus garryana</i>

western redcedar

Thuja plicata

Appendix 1: Discussion Points

Summary of Findings

Park	Rare plants found	Potential rare plant habitat	Red - or blue listed ecosystems	Name	Outstanding features
Quarry Park	no	Small Garry oak meadow at south end of park, possible vernal pools	Red	CDFmm/04 Douglas-fir – Grand fir – Oregon Grape; Garry oak - Ocean spray (GO)	Small Garry oak meadow, young to mature Douglas-fir forest
Gulf View Park	no	Small Garry oak meadow on west side of park near old bandstand	Red	Garry oak - Ocean Spray (GO)	Small Garry oak meadow; some mature trees
Lillian Hoffer Park	no	Seepage area along west boundary, and intertidal zone	Red (if mature or old)	CDFmm/04 Douglas-fir – Grand fir – Oregon Grape	Midden present, seepage area with high plant diversity, 200 m of Marine Foreshore
Nymph Point Park	no	Garry oak meadow, intertidal area, and steep rocky areas	Red (if mature or old)	Small areas of: CDFmm/03/02; Garry oak - Brome (QB), Garry oak - Ocean spray (GO)	Midden present, Garry oak meadow, several Juniper trees, and old Douglas-fir
Green Point	no	Two ponds full of aquatic life	none	Forest types would be blue or red listed if mature or old	Two ponds full of aquatic life
Denham Till Park	no	Interface areas of edge of forest	Red	CDFmm/01 Douglas-fir – Salal plant community	Mature forest which will become old with time
RO Bull Park	no	Small Garry oak meadow on east side of Park	Red	CDFmm/04 Douglas-fir – Grand fir – Oregon Grape; Garry oak - Brome (QB).	Exceptional stand of old trees, Garry oak meadow, high plant diversity

Marine Foreshore Areas

Of the 7 parks in this study, Marine Foreshore areas occur in two: Nymph Park and Lillian Hoffer Park. Marine Foreshore areas are defined as the 30 m strip extending inland from the high tide mark. These areas are usually protected by the local governments on Vancouver Island as Development Permit Areas. Foreshore areas are important as roosting locations for herons and eagles as well as many other birds, mammals, insects, and other wildlife. They support many plants that grow close to the ocean and provide shade to spawning areas on beaches used by Pacific sand lance and surf smelt – both of which are considered indispensable for salmon, and in turn Orca whales*. Also, marine foreshore areas often have archaeological sites – such as shell middens (in both Nymph and Lillian Hoffer Parks). Therefore, the only management activity that should take place in marine foreshore areas is the judicious removal of any hazardous tree. No (or very little) clearing of vegetation to enhance viewscapes should occur - unimpeded views are available from other spots within both parks. *<http://www.elc.uvic.ca/wordpress/wp-content/uploads/2019/11/2019-01-11-Saving-Orcas-by-Protecting-Fish-Spawning-Beaches.pdf>



Photo of excessive vegetation removal within the Marine Foreshore of Lillian Hoffer Park.

Pruning

There were a few examples of “over enthusiastic” pruning in the parks. One is visible in the photo above, where a Scouler’s willow was cut down, and another in the photo below. A lighter pruning of the willow tree would have provided a view window, and for the seaside juniper in the photo below, the result of the pruning is a strange looking tree which, ironically, detracts from the intended ocean view.

Ideally park staff tasked with pruning would know the names of the trees and shrubs that grow in the parks and know how they respond to pruning. For example, a shrub will generally regenerate even if severely pruned, however a tree may respond in an unpredictable manner. Also, knowing the trees and shrubs in the parks will decrease the chances of pruning a rare or uncommon tree. This is the case for seaside juniper, where the uncommon (and attractive) Pacific juniper was pruned to enhance a viewscape – even though other viewscales were available. In this case the branches were removed off a portion of the tree – that are unlikely to regenerate.



Nymph Park - pruning of a seaside juniper within a marine foreshore area.

Communications

Volunteer groups are a valuable resource – in that their work and commitment beautify the parks, and their efforts can dovetail with the work of local government to achieve common objectives. Volunteer groups also often have considerable expertise - including professionals who have worked, or currently work, in the field of environmental science, and even avid gardeners who are knowledgeable about plants, invasive species, and managing landscapes. North Saanich is encouraged to work collaboratively with such groups.